

Table 2.3 Manufacturing Energy Consumption for Heat, Power, and Electricity Generation by End Use, 2006

End-Use Category	Net Electricity ¹	Residual Fuel Oil	Distillate Fuel Oil	LPG ² and NGL ³	Natural Gas	Coal ⁴	Total ⁵
	Million Kilowatthours	Million Barrels			Billion Cubic Feet	Million Short Tons	
Indirect End Use (Boiler Fuel)	12,109	21	4	2	2,059	25	--
Conventional Boiler Use	12,109	11	3	2	1,245	6	--
CHP ⁶ and/or Cogeneration Process	--	10	1	(s)	814	19	--
Direct End Use							
All Process Uses	657,810	10	9	10	2,709	19	--
Process Heating	101,516	9	3	8	2,417	16	--
Process Cooling and Refrigeration	60,381	(s)	(s)	(s)	31	(s)	--
Machine Drive	422,408	(s)	4	(s)	126	3	--
Electrochemical Processes	60,323	--	--	--	--	--	--
Other Process Uses	13,181	(s)	1	1	136	(s)	--
All Non-Process Uses	157,829	1	9	7	426	(s)	--
Facility Heating, Ventilation, and Air Conditioning ⁷ ...	77,768	1	1	1	367	(s)	--
Facility Lighting	58,013	--	--	--	--	--	--
Other Facility Support	17,644	(s)	(s)	(s)	29	(s)	--
Onsite Transportation	2,197	--	6	5	3	--	--
Conventional Electricity Generation	--	(s)	1	(s)	19	(s)	--
Other Non-Process Use	2,208	(s)	1	(s)	8	(s)	--
End Use Not Reported	7,634	8	1	1	164	2	--
Total	835,382	40	22	21	5,357	46	--
Trillion Btu							
Indirect End Use (Boiler Fuel)	41	133	23	8	2,119	547	2,871
Conventional Boiler Use	41	71	17	8	1,281	129	1,547
CHP ⁶ and/or Cogeneration Process	--	62	6	1	838	417	1,324
Direct End Use							
All Process Uses	2,244	62	52	39	2,788	412	5,597
Process Heating	346	59	19	32	2,487	345	3,288
Process Cooling and Refrigeration	206	(s)	1	(s)	32	(s)	239
Machine Drive	1,441	2	24	2	129	56	1,654
Electrochemical Processes	206	--	--	--	--	--	206
Other Process Uses	45	Q	8	5	140	10	208
All Non-Process Uses	539	6	50	27	438	6	1,066
Facility Heating, Ventilation, and Air Conditioning ⁷ ...	265	4	4	5	378	2	658
Facility Lighting	198	--	--	--	--	--	198
Other Facility Support	60	1	(s)	(s)	30	(s)	91
Onsite Transportation	7	--	35	20	3	--	65
Conventional Electricity Generation	--	(s)	4	(s)	19	3	26
Other Non-Process Use	8	(s)	6	1	8	(s)	23
End Use Not Reported	26	49	4	5	168	52	304
Total	2,850	251	129	79	5,512	1,016	9,838

¹ "Net Electricity" is the sum of purchases, transfers in, and onsite generation from noncombustible renewable energy sources, minus quantities sold and transferred out; it excludes onsite generation from combustible fuels.

² Liquefied petroleum gases.

³ Natural gas liquids.

⁴ Excludes coal coke and breeze.

⁵ Total of listed energy sources. Excludes inputs of unallocated energy sources (5,820 trillion Btu).

⁶ Combined-heat-and-power plants.

⁷ Excludes steam and hot water.

-- = Not applicable. (s)=Estimate less than 0.5. Q=Withheld because relative standard error is greater than 50 percent.

Notes: • Data are estimates for the total consumption of energy for the production of heat, power, and electricity generation, regardless of where the energy was produced. Specifically, the estimates include the quantities of energy that were originally produced offsite and purchased by or transferred to the establishment, plus those that were produced onsite from other energy or input materials not classified as energy, or were extracted from captive (onsite) mines or wells. • Allocations to end uses are made on the basis of reasonable approximations by respondents. • Totals may not equal sum of components due to independent rounding, the presence of estimates that round to zero, and the presence of estimates that are withheld because the relative standard error is greater than 50 percent.

Web Page: For related information, see <http://www.eia.gov/emeu/mecs>.

Source: U.S. Energy Information Administration, Form EIA-846, "2006 Manufacturing Energy Consumption Survey."